

People in Nature

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**WILDLIFE CONSERVATION IN
SOUTH AND CENTRAL AMERICA**

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AND JOSÉ M. V. FRAGOSO, EDITORS



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To José Márcio Ayres, 1954–2003



That this book is dedicated to Marcio Ayres is powerfully appropriate, in that Marcio touched the lives and the intellects of so many of the authors. Marcio influenced the course of conservation in the Amazon probably more than any other single person in recent memory, and community-based management was at the heart of everything that he did.

Marcio will be forever associated with the creation of the Mamirauá and Amanã Reserves, two huge protected areas in central Amazonia that involve local communities in their management and development. In 1996, when the first was gazetted, Marcio helped introduce a new concept—the “sustainable development reserve.” As opposed to a national park, which in Brazil called for the removal of local people from the reserve, the sustainable development reserve actively involved local inhabitants in management. Brazil’s President Fernando Henrique Cardoso would later call Mamirauá “a living example of how it is possible to create positive coexistence between the inhabitants of a region and the preservation of that region.” This was not empty rhetoric. Marcio had realized early on that in the absence of strong governmental institutions in the Amazon, local people driven by their own self-interest could become the guardians of nature and natural resources. Mamirauá, situated in the flooded forests, contains important wildlife, timber, and especially fish resources. The management plan granted usufruct rights to the local people, allowing them with the help of government agencies to exclude nonresidents from fishing in the reserve. The result was one of those rare “win-win” situations: the average income of local fishermen rose from R\$320 in 1999 to R\$845 in 2001, based largely on an increase in fish production from management lakes from 6.2 to 15 tons, while at the same time populations of pirarucu (*Arapaima*), the most important fisheries species, tripled in density. And local people have seen a dramatic rise in their educational achievement and health.

Marcio was broadly recognized for his accomplishments. He moved from the national to the international stage (serving for example as the Deputy Chair of the Species Survival Commission). He moved in and out of the Brazilian government. He was the Carter Chair in Rain Forest Ecology with the Wildlife Conservation Society. He received the Conservation Award from the American Society of Primatology in 1987, the World Wildlife Fund Gold Medal in 1992, the Augusto Ruschi Award Medal from the Brazilian Academy of Sciences in 1995, and the Rolex Award in 2002.

But what underlay his accomplishments was a deep trust in the power of scientific knowledge. Marcio was by training a forest ecologist with an interest in primates. It was the white uakari monkey, shy denizen of the flooded forest, that led him as a doctoral student to Mamirauá in the first place. Starting in 1987, he assembled a scientific team that divided the proposed reserve into different management zones, some to protect spawning areas for fish, others to allow commercial harvests, and others for subsistence only. Biological and socioeconomic conditions continue to be monitored, and allow for adaptive changes in the management regimes. The success of Mamirauá and Amanã are a testament to the importance of knowledge in conservation.

Amazonian conservation lost a champion when Marcio passed away. Conservation lost a leader. But the world is a better place because of what he did.

John G. Robinson
July 15, 2003